Induction Chemotherapy for Acute Promyelocytic Leukemia: All-trans-retinoic acid (ATRA) and Idarubicin (PETHEMA PROTOCOL)

Contact Physician:_____ Pager: _____

Diagnosis:_____

Cycle:_____ **Day 1 = _____ Cycle 1: consent form done** □

Weight:_____ **Height**:_____ **BSA**:_____

Adjusted IBW:_____ **Adjusted BSA**:_____

Allergies:_____

All-trans-retinoic acid (ATRA) 45mg/m²/day PO in 2 divided doses starting day 1 and continue until HCR or for maximum of 90 days
(If patient ≤ than 20 years old reduce dose to 25mg/m²/day)
Idarubicin 12 mg/m²/day IV bolus on days 2,4,6,& 8.
(Omit day 8 for patients ≥ 70 years old.)

1. **Hydration:** Sodium Chloride 0.9% 100mL/hour IV continous.

2. **Prophylactic medications:**
   - □ Allopurinol: 300mg PO daily for 14 days
   - □ Acyclovir: 400mg PO twice daily
   - □ Antifungal:
   - □ GI prophylaxis:

3. **Anti-emetics:** (Moderate emetogenic potential)
   - □ Ondansetron 16mg PO prior to each dose of idarubicin, may give 16mg IV if unable to tolerate PO.
   - □ Dexamethasone: 10mg PO prior to each dose of idarubicin
   - □ Lorazepam: 0.5mg - 1 mg PO or IV every 4 hours prn nausea
   - □ Prochlorperazine 10mg PO or IV every 6 hours prn nausea

4. Chemotherapy:

- **All-trans-retinoic acid** (45mg/m²/day) _____mg PO rounded to the nearest 10mg in two divided doses daily (_____mg po twice daily) starting day 1_____ and continue until complete hematologic remission, or for a maximum of 90 days. (If patient ≤ 20 years of age, reduce dose to 25mg/m²/day)

- **Idarubicin** (12mg/m²/day) _____mg IV bolus on days 2,4,6, and 8.

  Idarubicin _____ mg IV push on day 2_____
  Idarubicin _____ mg IV push on day 4_____
  Idarubicin _____ mg IV push on day 6_____
  Idarubicin _____ mg IV push on day 8_____
  (Omit day 8 for patients ≥ 70 years of age)

5. APL Differentiation Syndrome (ALPDS):

- Notify Hematology team for any signs/symptoms of APLDS differentiation syndrome
- Consider APLDS syndrome when: unexplained fever, weight gain, serous effusions (pleural, pericardial), pulmonary infiltrates, peripheral edema, hypotension/orthostasis, rapidly increasing WBC.
- For changes consistent with APLDS syndrome, ATRA will be discontinued and dexamethsone 10mg IV every 12 hours prescribed
- After resolution of APLDS syndrome, ATRA may be resumed at 50% of initial dose and discontinue dexamethasone. If no recurrence of APL syndrome, increase to full dose after 3-5 days.

6. Coagulopathy:

- See lab monitoring and treatment guidelines under Hematology protocols; Treatment of Acute Promyelocytic Leukemia.

Signed: _____ Pager:_____

Blood 2004: 103(4) pp 1237-1243; Blood 1999: 94(9) 3015-3021

Addendum: Recommended Dose Adjustments

Idarubicin: If bilirubin >2.5 and <5 reduce dose by 50%
If bilirubin >5 do not give idarubicin